anderson, R. J.

February 27, 1929.

Dear Doctor Anderson:

Arrangements have been made for Doctor Doan to go to Baltimore this week-end and spend all of next week there.

You will be interested to know that the diagnosis was correct in every instance, both in blood and spinal fluid, by means of the test of your phospholipin. If this test works out, it will be a very interesting and immediate practical application of the work so far.

The studies with the antigenic serum are not so simple. In the first place, we found a slight anemia in all of our experiments last year when the phospholipin was given intraperitoneally. Now, giving the phospholipin intravenously, there appears to be a profound effect on all of the bone marrow. It becomes very cheesy. When we get a little further along with it, may we send you some of this bone marrow to be analyzed as you did the omentum, to see if there are any abnormal types of fat in it?

The animals that received the serum are not showing any very striking results in longevity; in fact it may come out, when we have analyzed our records, to be a little the other way. Apparently the matter was not as simple as to be analyzed in these first experiments.

We had some discussion the other day in regard to the omentum that you analyzed for us. Did you first extract a phosphatide and then from that phosphatide procure the acetonesoluble fat? Or did the acetone-soluble fat which looks like our fatty acid come directly from the omentum? The point, you see, is of great interest on this account. In the first experiments with the phospholipin, we gave 12 doses and got tubercles. Now to round out the story, inasmuch as we got true epithelioid cells after three doses of the fatty acid, we decided to give 1, 2, and 3 doses respectively of the phospholipin to three animals. In this material we get evidence, perhaps still not well worked out, of a phagocytosis of the phospholipin, but no true tubercles, as if tubercles were not formed until the cells had disintegrated the phospholipin and liberated some of the fatty acid. This is making a big jump and we have not got it all proved, but in this connection you will see that if you recovered fatty acid directly from the omentum, it might be additional proof that the cells were breaking up the phospholipin. All of this, I think, has very great interest in connection with how the body deals

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with these substances.

You will, I think, be interested to know that they are beginning to work on the lipoids from the pneumococcus. I believe probably stimulated by your work. Everyone is saying that lipoids are becoming more and more interesting, and that is, of course, due to your outstanding chemical research.

Very cordially yours.

Florence R. Sabin.

Doctor R. J. Anderson. Sterling Chemistry Laboratory. Yale University. New Haven, Conn.